

REMARKS

The abstract was objected to because it contains the word “means”. The abstract has been amended to delete the word “means”.

Claims 1-7 are rejected as being anticipated by Hayashi. Claim 1 has been amended to clearly distinguish from the Hayashi patent. As pointed out in the amended claim 1, the transfer operating section 81 is “capable of projecting and retracting in a front-and-rear direction of the material handling system and rotatable around a transfer axis 52 parallel with the rotary shelf axis 51”. As further stated in the amended claim 1, “a rotary circular path 23 of the rotary shelf 21 and a transfer circular path 53 for the transfer operating section 81 are tangentially superimposed relative to each other”, contrary to the structure in Hayashi. As stated further in the amended claim 1 “when the transfer operating section 81 only rotates to project or retract, loads are freely delivered between the rotary shelf 21 and the transfer means 51, and between the fixed shelf 101 and the transfer means 51”. These limitations differentiate applicant’s invention from Hayashi.

Hayashi discloses a FOUP (Front Opening Unified Pod) machine 22 which performs a horizontal transferring movement. Please refer to Hayashi column 5 in the sentence beginning in line 7 wherein it is stated that the FOUP transfer machine 22 transfers “by vertical movement, rotation movement and lateral movement”. Also please refer to the paragraph at the end of column 8 and running over to column 9 wherein it is again stated that “the FOUP transfer machine 22 is opposed to the FOUP sending/receiving position of the FOUP rotation accommodating shelf 36 by vertical movement, rotation movement and lateral movement”.

Contrary to Hayashi which performs horizontal transferring, applicant’s transfer means 51 does not move laterally and there are two circular paths, namely a rotary circular path 23 for the rotary shelf 21 and a transfer circular path 53 for the transfer operating section 81. Thus, when the transfer operating section 81 only rotates to project or retract, loads are freely delivered between the rotary shelf 21 and the transfer means 51, and between the fixed shelf 101 and the transfer means 51.

In view of the differences referred to above, it is submitted that claim 1 as amended is entitled to allowance.

Claims 2-7 depend from claim 1 and add additional novel features. Thus, claim 2 points out that the rotary shelf, transfer means and fixed shelf are associated with one rotary circular path and one transfer path, claim 3 states that the fixed shelf is disposed at each of a plurality of places on the transfer circular path, claim 4 points out that the rotary shelf is provided with groups of load receiving sections in a plurality of vertically spaced steps, the fixed shelf is provided with load support sections in a plurality of vertically spaced steps and the transfer means is adapted to operate correspondingly to the plurality of vertically spaced steps in the rotary shelf and the fixed shelf, claim 5 points out that the rotary shelf is rotatable forwardly and backwardly for an angle up to a maximum of 180 degrees, claim 6 states that during the transfer means is operating with respect to the fixed shelf, the rotary shelf is prepared in advance, and claim 7 states that the rotary shelf, transfer means and fixed shelf are disposed in a clean atmosphere. These additional limitations serve to further distinguish from the prior art.

Claims 8-16 have been withdrawn as being directed to a non-elected invention. These claims are being retained in the application pending decision as to whether or not to file a divisional application or applications.

In view of the foregoing, this application is now believed to be entitled to allowance and such action is respectfully requested.

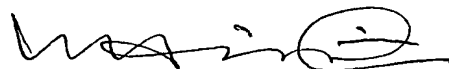
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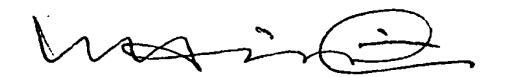
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